

— Osteoporosis —

THE BONES OF CONTENTION

Contrary to the medical marketing hype, synthetic hormonal drugs, dairy products and most calcium supplements actually weaken the bones and have other harmful effects on health.

by Sherrill Sellman © 1998

Light Unlimited Productions
Locked Bag 8000-MDC
Kew, Victoria 3101, Australia
Telephone: +61 (0)3 9249 9591
Fax: +61(0)3 9855 9991
E-mail: golight@ozemail.com.au

A NEW DISEASE, A NEW MARKETING OPPORTUNITY

Osteoporosis is big news—and big business—these days. As a disease, it emerged out of obscurity only two decades ago to become a concern for women throughout the industrialised world. Advertising campaigns in the media and fact sheets in doctors' waiting rooms and pharmacies continually warn women of the dangers of disappearing bone mass.

The marketing hype announces that one woman in two over the age of 60 is likely to crumble from an osteoporotic fracture (yet one man in three will also get osteoporosis); that the incidence of hip fracture exceeds that of cancer of the breast, cervix and uterus combined; and that 16 per cent of patients suffering hip fractures will die within six months while 50 per cent will require long-term nursing care.¹

The statistics also say that in the United States over 20 million people have osteoporosis and approximately 1.3 million people each year will suffer a bone fracture as a result of osteoporosis. In 1993, the US incurred an estimated loss of US\$10 billion due to lost productivity and health care costs related to osteoporosis.² However, it's important to put these statistics into perspective. While it is true that death occurs in men and women who have hip fractures, these people are usually very elderly and frail. People who die from hip fractures are not only the most frail but are also ailing from other causes.

Women are constantly bombarded with the message that the war on bone loss must include calcium supplements and a daily consumption of calcium-rich foods, primarily dairy products. Doctors strongly recommend long-term use of (synthetic) oestrogen to the postmenopausal woman, and, if additional help is required, suggest the use of bone-building drugs like Fosamax. So, armed with this powerful arsenal, a woman is assured that she will walk tall and fracture-free through the latter part of her life. Unfortunately, this is far from the truth.

The most popular treatments for osteoporosis are in fact dangerous to women's health. Synthetic oestrogen is a known carcinogenic drug. Most calcium supplements are not only ineffectual in rebuilding bone, but they can actually lead to mineral deficiencies, calcification and kidney stones. And contrary to popular belief, dairy products have been proven to be a leading *cause* of bone loss.

THE OSTEOPOROSIS INDUSTRY: AN UNHOLY ALLIANCE

Osteoporosis has spawned a phenomenal growth industry. The sale of just one oestrogen drug, Premarin, grossed US\$940 million worldwide in 1996.³ The US dairy industry is thriving with its annual US\$20 billion of revenue.⁴ And sale of calcium supplements has spiralled upwards into the hundreds of millions of dollars.

The osteoporosis industry has not only created a huge market for its wares; it has also been specifically designed to target women. Obviously, the fear-mongering advertising campaign about osteoporosis as a 'silent thief', stalking women's bones, has paid off. Unfortunately, unsuspecting women are unaware they are really being stalked by an unholy alliance of the pharmaceutical companies, the medical profession and dairy industry who have orchestrated one of the most successful and well-planned marketing manoeuvres in history.

By distorting the facts, by manipulating the statistics and by withholding scientific research in the pursuit of profits, this powerful alliance has once again jeopardised lives by exposing women to an increased incidence of such illnesses as breast and ovarian cancer, strokes, liver and gall bladder disease, diabetes, heart disease, allergies, kidney stones and arthritis.

THE ROOTS OF DECEPTION

The Second World War heralded a major turning point in medicine. In the pre-war period, drug companies were mostly small businesses primarily concerned with making herbal formulas. The emergence of a more sophisticated science after the war would change the face of medicine forever.

According to Sandra Coney, author of *The Menopause Industry*: "By harnessing the power and prestige of science, medicine moved into a new 'modern' era, rendering the 'healing hands' approach obsolete. Medicine could develop a technocracy in which the experts were armed with chemistry and machinery."⁵

The development of synthetic hormones parallels the growth of the drug companies. The creation of the first synthetic oestrogen, diethylstilboestrol (better known as DES), shortly followed by the discovery of a process which synthesised steroid hormones from the urine of pregnant mares (the drug is known as Premarin), finally brought a cheap source of oestrogen onto the market.

The introduction of oral contraceptives in 1960 initiated the first widespread use of these drugs by women. A few years later, in 1966, the menopausal woman became the focus of the ever-expanding industry.

The unfortunate myth that all menopausal women would suffer total rack and ruin of their bodies and minds without supplementation of oestrogen spread like wildfire through the industrialised countries. It was a bonanza for the drug companies, as women flocked to partake of this supposed 'fountain of youth' pill.

Although warnings about oestrogen had been made sporadically for nearly 30 years, the rush for profits virtually ignored them. In particular, it was known that oestrone, the form of oestrogen in Premarin, could be associated with the development of endometrial cancer.

Sandra Coney writes: "As early as 1947, it was reported by a young researcher at Columbia University, Dr Saul Gusberg, that there was a steady stream of oestrogen users requiring diagnostic curettage for abnormal bleeding. The pathology reports from the curettes showed overstimulation of the endometrium."⁶

The bubble burst in 1975 with the publication of a major study in the prestigious *New England Journal of Medicine*, which showed that the risk of endometrial cancer increased 7.6 times in women using oestrogen. Longer-term users were at even greater risk. Women who used oestrogen for seven or more years were 14 times more likely than non-users to develop endometrial cancer.⁷

In that same month, figures from the California Cancer Registry confirmed the findings. Among white women 50 years of age or over, there had been more than an 80 per cent increase in endometrial cancer between 1969 and 1974.⁸

Evidence of oestrogen's dangers was mounting. Besides endometrial cancer, oestrogen was also linked to breast cancer, ovarian cancer, gall bladder and liver disease, and diabetes. More questions were raised about other possible side-effects.

The drug company Ayerst's rising star, Premarin, started to take a serious nosedive, and so did the company's profits. There was a dramatic fall in hormone prescriptions around the world. Oestrogen use declined by 18 per cent from 1975 to 1976 and by another 10 per cent from 1976 to 1977.⁹

THE ART OF MANIPULATING PERCEPTIONS

Something had to be done to salvage such a lucrative market. Since unopposed oestrogen was deemed as the cause of endometrial cancer, the drug companies, acknowledging their misjudgement on prescribing unopposed oestrogen to women with intact uteri, attempted to rectify their fiasco by adding a synthetic progesterone, progestin. It was argued that progestin would protect the uterus from oestrogen's proliferative effects (as is done in nature), although no long-term studies were conducted to prove the safety of combining progestin and oestrogen. Thus, hormone replacement therapy (HRT)—oestrogen therapy repackaged—made its debut.

However, women were seriously starting to question the use of synthetic hormones, so the drug companies had to find a compelling reason to lure them back on to hormones. Osteoporosis, a disease that 77 per cent of women at that time had never even heard of, was waiting in the wings. As Sandra Coney points out: "In the interests of rehabilitating HRT, women have been subjected to 'a carefully orchestrated campaign' to advocate oestrogen as a prevention for osteoporosis."¹⁰

To transform the public perception of hormones and exonerate their life-threatening effects, certain pre-conditions had to be created: the gravity of osteoporosis had to be impressed on them; women needed to understand that it was 'their' disease; menopause had to be defined as the primary cause; and women had to perceive the cancer risk as trivial when measured against the benefit.

In the medical literature, osteoporosis was originally seen as problem of bones, not women. When looking at hip fracture in terms of effect on the individual and cost to country, men have half as many fractures as women and they are more likely to die as a result of fractures than are women. Yet little is said about men and osteoporosis. The 'male factor' was intentionally played down because it didn't fit with the redefinition of the condition as a woman's disease caused by lack of

oestrogen. This strategy was necessary to promote HRT.

To accomplish this, Ayerst hired a top public relations firm to market osteoporosis. They had a big job to do. A major promotional campaign was launched, targeting women's magazines. Medical experts were marched out to preach the HRT/osteoporosis gospel on radio and TV talk shows. Health workers were enlisted to mediate the message to consumers and doctors. A disfigured old woman, bent over with 'dowager hump', was the shock-tactic symbol of the campaign and effectively struck fear into the hearts of women. Comments such as "The invalidation which can occur with osteoporosis is far more grave than the putative risk of endometrial cancer"¹¹ and "Even if you took oestrogen without progesterone, you are 15 times more likely to die from hip fracture than of endometrial cancer"¹² were used to seduce women back to hormones.

The drug company-inspired campaign to re-market oestrogen with a clean image was stunningly successful. Sandra Coney notes: "In the 1990s, the reorientation of osteoporosis as a woman's disease is complete. It is now mandatory to include osteoporosis as a major 'symptom' in any discussion of the menopause. By convincing the public and the medical profession that osteoporosis is a crippling and 'killing' disorder and oestrogen the only

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cure, HRT has been imbued with a kind of saintliness. HRT offers salvation where otherwise there would be none, rescuing women from an unthinkable fate as deformed old crones. In face of this, how could anyone be so ungrateful as to raise the question of risk?"¹³

Common sense was thrown out the window when it came to hormone therapy. There was no discussion of the wisdom or ethics of medicating huge numbers of asymptomatic healthy women with oestrogen drugs which are acknowledged as among the "most potent drugs in the pharmacopoeia".¹⁴ The fact that this approach has never been recommended for any other drug or for the prevention of any other condition was immaterial. The switch from HRT as a treatment to HRT as a long-term preventive therapy occurred without debate or justification.

Osteoporosis became a high-profile issue because it sells things. Besides resurrecting HRT and securing its front-line position in the treatment protocol, the dairy industry and the pharmaceutical companies that make calcium supplements hitched a ride on the osteoporosis bandwagon. Osteoporosis suited a number of vested interests. It came to the rescue of the dairy food industry at a time when sales were plummeting because of people's anxieties about eating foods containing saturated fats. Calcium was added to skim milk, thus transforming milk into a product that could be marketed as healthy—a prevention against osteoporosis. Women were warned that their bones would become brittle if they didn't take extra calcium by way of the new calcium-fortified dairy products.¹⁵

The makers of calcium supplements also claimed that their products could prevent bone loss, despite the fact that there is no absolute evidence that this is true. By 1986 American consumers were spending US\$166 million on calcium supplements. Prior to the calcium craze, and contributing to it, the US National Institutes of Health (NIH) had recommended in 1985 that women should increase their daily calcium allowance. By 1989 the NIH was warning that the promoters of calcium "promise more than calcium is going to deliver".¹⁶

THE BARE BONES ABOUT BONES

To understand the many myths about osteoporosis and its prescribed treatments, it is vital to understand the nature of bones. Bone is living tissue which undergoes constant transformation. Bone might appear to be static, but its basic components are continually renewed. At any given moment in each of us, there are from 1 to 10 million sites where small segments of old bone are being dissolved and new bone is being laid down to replace it. Bone tissue is nourished and detoxified by blood vessels in constant exchange with the whole body.¹⁷ A healthy body will ensure healthy bones.

Bone-forming cells are of two different kinds: osteoclasts and osteoblasts. The job of osteoclasts is to travel through the bone in search of old bone that is in need of renewal. Osteoclasts dissolve bone and leave behind tiny unfilled spaces. Osteoblast cells then move into these spaces in order to build new bone. In this way, bone heals and renews itself in a process called "remodelling". This self-repair capability is extremely important. Imbalances in bone-remodelling contribute to osteoporosis. When more old

bone is eaten up than new bone is laid down, bone loss occurs.

Bone turnover never stops completely. In fact, after about the age of 50 the rate increases, though it's not quite co-ordinated. The bone-building cells, the osteoblasts, become less and less capable of completely refilling the spaces made by the osteoclasts.¹⁸ The peak amount of bone you started with and the rate of this loss determines the density of your bones. Density varies greatly in different individuals, cultures, races and sexes.

As Dr Susan Love, author of *Dr Susan Love's Hormone Book*, explains: "...the correct term for low bone density is 'osteopenia'. It is only one factor in osteoporosis and the fractures that result from it. Another factor is the micro-architecture of the bone. As osteoclasts absorb more bone than is rebuilt, the micro-architecture becomes fragile. As it weakens, the wrist and hip become more vulnerable to fracture. Your vertebra doesn't really fracture or crack but collapses on itself, causing loss of height, and if enough vertebra are crushed, a dowager hump is created."¹⁹

How real is this "dowager hump" syndrome? According to Dr Bruce Ettinger, Associate Clinical Professor of Medicine at the University of California and an endocrinologist: "...women shouldn't worry about osteoporosis. The osteoporosis that causes

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pain and disability is a very rare disease. Only 5% to 7% of 70-year-olds will show vertebral collapse; only half of these will have two involved vertebrae; and perhaps one-fifth or one-sixth will have symptoms. I have a very big referral practice and I have very few bent-over patients. There's been a tremendous hullabaloo lately, and there are a lot of worried women—and excessive testing and administration of medications."²⁰

The medical definition of osteoporosis used to be "fractures caused by thin bones". It has since been redefined to "a disease characterised

by low bone mass and micro-architectural deterioration of bone tissue which lead to increased bone fragility and a consequent increase in fracture risk".²¹ However, there is a problem with defining osteoporosis as a disease, not a fracture. Low bone mass is only one risk-factor for osteoporosis, not osteoporosis itself. It's a warning sign that might be useful, so you can begin to consider ways to keep the disease itself from occurring. Dr Love offers a striking analogy: "This is like defining heart disease as having high cholesterol rather than having a heart attack. Needless to say, this new definition has increased the number of women and men who have osteoporosis."²²

Although this new disease has two components—bone mass and micro-architecture—micro-architecture is virtually ignored. The problem is that, presently, only bone density can be measured. Also, not everyone with low bone density will get fractures. For instance, Asian women have low bone density yet have very low rates of bone fractures.

The general assumption has been that once bone reaches a certain level of thinness, it becomes subject to fractures more easily. Now that more is known about bone physiology, it is clear that this is not the full story. Bone does not fracture due to thinness alone. Leading bone expert, and author of *Better Bones, Better Body*, Susan E. Brown, PhD, states: "Osteoporosis by itself does not cause bone fractures. This is documented simply by the fact that half of the population with thin osteoporotic bones in fact never fracture."²³

Lawrence Melton of the Mayo Clinic noted as early as 1988: "Osteoporosis alone may not be sufficient to produce such osteoporotic fracture, since many individuals remain fracture-free even within the sub-groups of lowest bone density. Most women aged 65 and over and men 75 and over have lost enough bone to place them at significant risk of osteoporosis, yet many never fracture any bones at all. By age 80, virtually all women in the United States are osteoporotic with regard to their hip bone density, yet only a small percentage of them suffer hip fractures each year."²⁴

Why does there seem to be many more women now with osteoporosis than in the past? As Dr Love explains: "...part of that increase is nothing but a change in definition... Needless to say, the broader the criteria used to define osteoporosis, the more women will fall into that category. The level of bone density that defines osteoporosis has been set rather high, with the result that most older women will fall into the 'disease' category—which is very nice for the people in the business of treating disease."²⁵

THE MYTHICAL CAUSES OF OSTEOPOROSIS

There are many cultures in the world where the postmenopausal woman is fit, active and healthy until the end of her life. It is equally true that the women in these cultures do not suffer from osteoporosis. If menopause itself were indeed one of the causes of osteoporosis, all women throughout the world would be handicapped with fractures. This is clearly not the case.

The Maya women live for 30 years after menopause but they don't get osteoporosis, they don't lose height, they don't develop dowager hump and they don't get fractures. A research team analysed their hormone levels and bone density and found that their oestrogen levels were no higher than those of white American women—in some cases they were even lower. Bone density tests showed that bone loss occurred in these women at the same rate as their US counterparts.²⁶

It used to be thought that all women have a considerable decrease in bone from lower oestrogen levels at menopause, thus oestrogen deficiency was said to be the cause of osteoporosis. Continuing research has disproved this idea. Studies following individual women's bone density over time have shown that although some women lose a lot of bone with menopause, others lose comparatively little; also, that some loss starts earlier.²⁷ One study using urine tests to measure calcium loss found that some women are 'fast losers' and others are naturally 'normal losers'.

If osteoporosis is due to oestrogen deficiency, we would expect to find lower oestrogen levels in women with osteoporosis than in women without the disorder. However, studies have shown that sex hormone levels were found to be similar in postmenopausal women both with and without osteoporosis.²⁸

Dr Susan Brown comments: "Even in the United States, where osteoporosis is common, many older women remain free from the disorder. In addition, the higher male and lower female osteoporosis rates found in some cultures do not support the notion that excessive bone loss is due to declining ovarian oestrogen produc-

tion. Adding another dimension, we find that vegetarian women have lower oestrogen serum levels yet higher bone density than their meat-eating peers."²⁹

Obviously it is a gross oversimplification to say that osteoporosis is a single, inevitable disease which occurs in all women at menopause. A woman who has her ovaries surgically removed has double the loss of bone compared to a woman going through a natural menopause. Since the ovaries continue to produce hormones in addition to oestrogen after menopause, it is obvious that oestrogen is only one factor connected to bone loss.

Dr Jerilynn Prior, Professor of Endocrinology at the University of British Columbia, has conducted research that seriously challenges oestrogen's key role in preventing bone loss. Her research confirms that oestrogen's role in combating osteoporosis is only a minor one. In her study of female athletes she found that osteoporosis occurred to the degree that the athletes became progesterone-deficient, even though their oestrogen levels remained normal.

Dr Prior continued her research with non-athletic women, and they showed the same results. While both these groups of women were menstruating they had anovulatory (not ovulating) cycles and were thus deficient in progesterone. As a result of her extensive research, she confirmed that it is not oestrogen but *progesterone* which is the key bone-building hormone. Such studies seriously challenge the oestrogen deficiency—osteoporosis link.³⁰

Dr John Lee—doctor, researcher and a leading authority on natural hormone treatments—conducted a three-year study treating 63 postmenopausal women with natural progesterone. The women showed a 7 to 8 per cent increase in bone density in the first year; a 4 to 5 per cent increase in the second year; and a 3

to 4 per cent increase in the third year. This finding has been reinforced by Dr William Regelson, another expert on hormones: "Given the fact that 25 per cent of all women are at risk of developing osteoporosis, I think it is unconscionable that progesterone's role in this disease has been neglected."³¹

While oestrogen plays an important and complex role in bone health maintenance, osteoporosis cannot simply be attributed to lower oestrogen levels occurring at menopause. Numerous dietary, lifestyle and endocrine factors contribute to the development of excessive bone loss. Osteoporosis is not simply produced by the lack of one single hormone.

The intention to make menopause and oestrogen deficiency the major causes of osteoporosis gave HRT new legitimacy as a long-term preventive treatment for osteoporosis. Even though oestrogen has been shown to have some effectiveness in slowing down the rate of bone loss because it slows the rate at which bone cells are resorbed, it cannot rebuild bone. Unfortunately, this benefit is not experienced by all women. To have any effectiveness for the postmenopausal women most at risk—those 70 years of age or older—women must stay on oestrogen continuously for decades.

This, then, becomes quite a serious dilemma for women. It is now known that HRT increases the incidence of breast cancer by 10 per cent a year for each year of use. Ten years of taking HRT

THE REAL BONE CALCIUM THIEVES

- Acid/alkali imbalance • Alcohol • Antacids containing aluminium • Anorexia
- Antibiotics • Caffeine • Diuretics
- Endocrine imbalance of parathyroid, thyroid, adrenal, ovaries, kidneys • Excessive animal protein and dairy products • High saturated-fat consumption • High salt intake
- History of dieting • Hysterectomy; removal of ovaries • Indoor existence; lack of vitamin D
- Oral contraceptive pill and Depo-Provera
- Pharmaceutical drugs and treatments, i.e., anti-convulsants, chemotherapy, radiation, psychotropic drugs, e.g., Valium and Librium
- Poor digestion • Sedentary lifestyle • Stress/adrenal exhaustion • Sugar consumption
- Tobacco • Toxic metals, e.g., lead, mercury, cadmium, aluminium, tin

increases the risk to 100 per cent.³² It is obvious that the many risks of HRT far outweigh the rather limited beneficial effects on bone, especially when there are many other safe and effective alternatives. Is the increased risk of a life-threatening disease really worth it?

THE CALCIUM DEFICIENCY MYTH

When asked about the causes of osteoporosis, most people will chime in with "Lack of calcium". This idea is reinforced on a daily basis as women are reminded to drink their three glasses of milk a day and take their calcium supplements. Even young, healthy, non-osteoporotic women are paranoid about potential bone loss and take measures to shore up their bone strength with plenty of calcium. Fear of insufficient calcium has become a national obsession. Is there really a national calcium deficit?

Since bone is largely composed of calcium, it might appear logical to link calcium intake with bone health. Western women are now encouraged to consume at least 1,000 to 1,500 mg of calcium daily. It is curious, however, when cross-cultural data clearly shows that in less-developed countries—where people consume little or no dairy products and ingest less total calcium—there are much lower rates of osteoporosis.³³

The Bantu of Africa have the lowest rates of osteoporosis of any culture, yet they consume from 175 to 476 mg of calcium daily. The Japanese average about 540 mg daily, but the early postmenopausal spinal fractures so common in the West are almost unheard of in Japan. Overall, their spinal fracture rate is one-half that of the US. All this is true, even though the Japanese have one of the longest life spans of any population. Studies of populations in China, Gambia, Ceylon, Surinam, Peru and other cultures all report similar findings of low calcium intake and low osteoporosis rates.³⁴ Anthropologist Stanley Garn, who studied bone loss over a 50-year period in people in North and Central America, failed to find a link between calcium intake and bone loss.³⁵

While it is agreed upon that adequate calcium is absolutely necessary for development and maintenance of healthy bones, there is no one standard ideal calcium intake. It is also obvious from these studies that high calcium intake is not necessary for healthy bones.

There is certainly a problem with bone health in Western cultures. However, other vital factors that determine the complex process of healthy bones must be understood. Bones are affected by: the intake of other bone-building nutrients; consumption of potentially bone-damaging substances like excess protein, salt, saturated fat and sugar; the use of some drugs, alcohol, caffeine and tobacco; the level of physical exercise; exposure to sunlight and environmental toxins; the impact of stress; the removal of the ovaries and uterus; and many factors that limit endocrine gland functioning.

There are at least 18 key bone-building nutrients essential for optimum bone health. If one's diet is low in any of these nutrients, the bones will suffer. They include phosphorus, magnesium, manganese, zinc, copper, boron, silica, fluorine, vitamins A, C, D, B6, B12, K, folic acid, essential fatty acids and protein.

The body uses minerals only when they are in proper balance. For example, girls who consume diets high in meat, soft drinks

and processed foods which have high levels of phosphorus have been found to have an alarming loss of bone mass.³⁶ Too high a ratio of phosphorus in relationship to calcium will cause calcium to be pulled out of the bones in an attempt to compensate.

Scientific evidence shows unequivocally that, by themselves, calcium supplements just don't work.³⁷ And contrary to popular thought, calcium supplementation does not reduce the risk of fracture. There is now evidence that a high calcium supplement level is actually associated with a 50 per cent increase in the risk of fracture.³⁸ However, as yet, there remains no proof that increasing the calcium intake with supplements or diet after menopause prevents fractures. In fact, several studies indicate that it doesn't really appear to lower the incidence of fractures at all. In *Science* (August 1978) it was stated the "link between calcium and osteoporosis was made on insufficient grounds" and that the advertisers were way out ahead of the scientific evidence. But a diet rich in

calcium in early childhood and premenopausal years does build stronger bones, reducing risk of thin bones after menopause.

The worst calcium supplements are bone meal, oyster shell and dolomite because they cannot be efficiently absorbed and may contain lead. Excessive calcium intake also leads to constipation and, more worrisome, kidney stones and calcification of the joints. The most effective form of supplementation is hydroxyapatite (especially if it is formulated with boron). This is the most natural of all calcium supplements and a

complete bone food.³⁹

And what about dairy foods for bones? Dr Michael Colgan, a well-known researcher in nutrition, an author and the founder of the Colgan Institute in the US, has said: "The medical advice to drink milk to prevent osteoporosis is self-serving poppycock." After all we've been indoctrinated with, it's a shocking revelation to discover that dairy products contribute to bone loss. The countries that consume the highest amounts of dairy products also have the highest rates of osteoporosis; the non-dairy-consuming countries have the lowest osteoporosis rates.

In the body's wisdom, the highest priority is to maintain the proper acid/alkali balance in the blood. A high protein diet of meat and dairy products poses a great osteoporosis risk because it makes the blood highly acidic. Calcium must then be extracted from the bones in order to restore proper balance. Since calcium in the blood is used by every cell in the body to maintain its integrity, the body will sacrifice calcium in the bone to maintain homeostasis in the blood.

In a year-long study of 22 postmenopausal women, there was no significant improvement in calcium levels when their diets were supplemented daily with three 300 mL glasses of skim milk (equivalent to 1,500 mg of calcium). The authors stated this outcome was due to "the average 30% increase in protein intake during milk supplementation". Since skim milk contains almost double the protein of whole milk, it promotes an even greater rate of calcium excretion.⁴⁰

In a recently published 12-year study of nearly 78,000 women it was concluded that milk consumption does not protect against hip or forearm fracture. Female milk-drinkers actually had a significantly increased risk of fracture, and teenage milk-drinking was not protective against osteoporosis.⁴¹

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There are still other problems with dairy products. They contain antibiotics, oestrogen hormones, pesticides and an enzyme that is a known factor in breast cancer. In addition, another recent study revealed that lactose-intolerant women who drank milk were at greater risk of ovarian cancer and infertility.⁴²

THE BONE-BUILDING DRUGS SCAM

The drug companies boast one other weapon in their anti-osteoporosis arsenal: medication that promises to halt bone loss. One of the drugs in favour is Fosamax, the only non-hormonal drug approved by the US FDA to treat osteoporosis. Studies of this drug were cleverly stopped after four to six years. This is just the point at which the fracture rate for women taking similar drugs began to rise. So, although Fosamax will superficially appear to increase bone density, in reality it decreases bone strength. Fosamax is a metabolic poison and will actually kill osteoclast cells which are required to maintain dynamic bone equilibrium.⁴³ In addition, Fosamax can cause severe and permanent damage to the oesophagus and stomach. It is also hard on the kidneys and can cause diarrhoea, flatulence, rashes, headaches and muscular pain. Rats given high doses developed thyroid and adrenal tumours. Fosamax also causes deficiencies of calcium, magnesium and vitamin D, all essential for the bone-building process.⁴⁴

BUILDING HEALTHY BONES

It is clear that the osteoporosis treatments doctors most often recommend to women—HRT, calcium supplements, dairy products and drugs—have certainly benefited the medical establishment and drug companies most of all. The real long-term benefit to women is minimal at best, and life-threatening at worst.

Fortunately there are other options that not only can prevent further deterioration of bone density and poor bone repair but can actually increase bone mass in women of all ages. According to Dr Susan Brown, the six intervention areas that form the strongest, surest program for building and repairing bone include: maximising nutrient intake, building digestive strength, minimising anti-nutritive intake, exercising (especially with weights), developing an alkaline diet and promoting endocrine vitality. She

believes that "no matter where you are on the bone health continuum, no matter what your lifestyle has been, it is never too late to begin rebuilding healthy bones".⁴⁵

Some of the leading lights in safely preventing, halting and restoring bone mass include supplementation with natural progesterone, hydroxyapatite, calcium citrate, or Chinese herbal formulas. When it comes to ensuring healthy bones, it's important to remember it's not only about what one puts in the body but also what one doesn't. (See box, *The Real Bone Calcium Thieves*.)

More and more studies are validating the extremely beneficial effects of a regular weight-bearing exercise program in increasing bone density in postmenopausal women. A woman's lifelong tendency to diet has been an unrecognised cause of bone loss. At least seven well-controlled studies have shown that when a woman diets and loses weight, she also loses bone. A recent study found that in less than 22 months, women who exercised three times a week increased their bone density by 5.2 per cent, while sedentary women actually lost 1.2 per cent.⁴⁶ Effective strength-training includes such exercise as walking uphill, bicycling in low gear, climbing steps and training with weights.

Osteoporosis is not an ageing disease or an oestrogen or calcium deficiency but a degenerative disease of Western culture. We have brought it upon ourselves through poor dietary habits and lifestyle factors, and exposure to pharmaceutical drugs. It is our ignorance that has made us vulnerable to the vested interests that have intentionally distorted the facts and willingly sacrificed the health of millions of women at the altar of profit and greed. It is only by our willingness to take responsibility for our bodies and make the commitment to return to a healthy, balanced way of life that we'll be able to walk tall and strong for the rest of our lives.

About the Author:

Sherrill Sellman is the author of *Hormone Heresy: What Women MUST Know About Their Hormones*. Due to the great demand from women around Australia for counselling on hormone health and natural hormone alternatives, and for referrals to sympathetic health practitioners, Sherrill has started the Natural Hormone Health Practising and Referral Service. It will be available from 16 November 1998 by calling 1902 211 191 (in Australia).

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